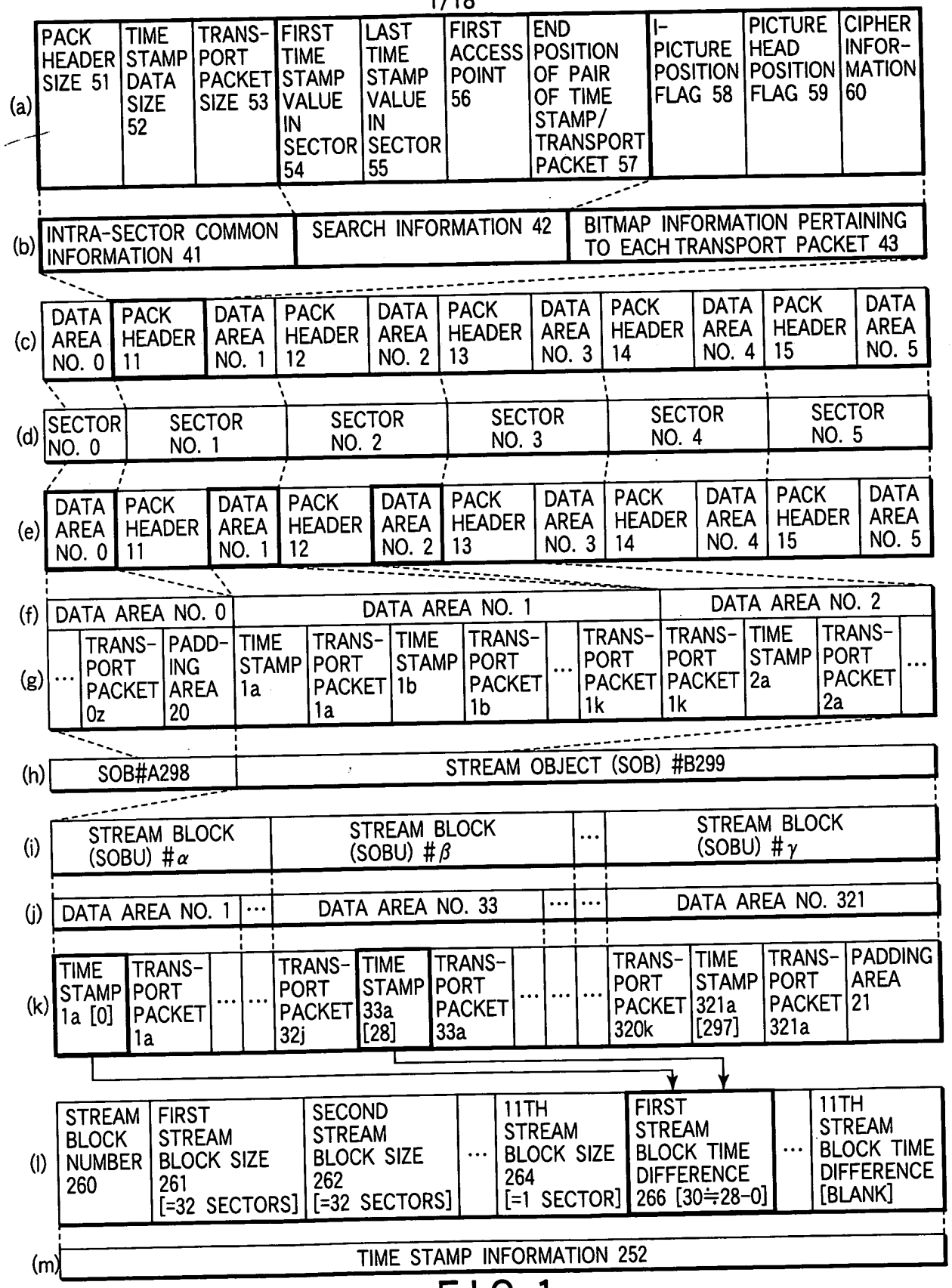

(a)
PACK HEADER SIZE 51
TIME STAMP DATA SIZE 52
TRANS-PORT PACKET SIZE 53
FIRST TIME STAMP VALUE IN SECTOR 54
LAST TIME STAMP VALUE IN SECTOR 55
FIRST ACCESS POINT 56
END POSITION OF PAIR OF TIME STAMP/ TRANSPORT PACKET 57
I-PICTURE POSITION FLAG 58
PICTURE HEAD POSITION FLAG 59
CIPHER INFOR-MATION 60
(b)
INTRA-SECTOR COMMON INFORMATION 41
SEARCH INFORMATION 42
BITMAP INFORMATION PERTAINING TO EACH TRANSPORT PACKET 43
(c)
DATA AREA NO. 0
PACK HEADER 11
DATA AREA NO. 1
PACK HEADER 12
DATA AREA NO. 2
PACK HEADER 13
DATA AREA NO. 3
PACK HEADER 14
DATA AREA NO. 4
PACK HEADER 15
DATA AREA NO. 5
(d)
SECTOR NO. 0
SECTOR NO. 1
SECTOR NO. 2
SECTOR NO. 3
SECTOR NO. 4
SECTOR NO. 5
(e)
DATA AREA NO. 0
PACK HEADER 11
DATA AREA NO. 1
PACK HEADER 12
DATA AREA NO. 2
PACK HEADER 13
DATA AREA NO. 3
PACK HEADER 14
DATA AREA NO. 4
PACK HEADER 15
DATA AREA NO. 5
(f)
DATA AREA NO. 0
DATA AREA NO. 1
DATA AREA NO. 2
(g)
... TRANS-PORT PACKET 0z
PADD-ING AREA 20
TIME STAMP 1a
TRANS-PORT PACKET 1a
TIME STAMP 1b
TRANS-PORT PACKET 1b
... TRANS-PORT PACKET 1k
TRANS-PORT PACKET 1k
TIME STAMP 2a
TRANS-PORT PACKET 2a
...
(h)
SOB#A298
STREAM OBJECT (SOB) #B299
(i)
STREAM BLOCK (SOBU) #α
STREAM BLOCK (SOBU) #β
...
STREAM BLOCK (SOBU) #γ
(j)
DATA AREA NO. 1
...
DATA AREA NO. 33
...
...
DATA AREA NO. 321
(k)
TIME STAMP 1a [0]
TRANS-PORT PACKET 1a
... ...
TRANS-PORT PACKET 32j
TIME STAMP 33a [28]
TRANS-PORT PACKET 33a
... ...
TRANS-PORT PACKET 320k
TIME STAMP 321a [297]
TRANS-PORT PACKET 321a
PADDING AREA 21
(l)
STREAM BLOCK NUMBER 260
FIRST STREAM BLOCK SIZE 261 [=32 SECTORS]
SECOND STREAM BLOCK SIZE 262 [=32 SECTORS]
...
11TH STREAM BLOCK SIZE 264 [=1 SECTOR]
FIRST STREAM BLOCK TIME DIFFERENCE 266 [30≒28-0]
...
11TH STREAM BLOCK TIME DIFFERENCE [BLANK]
(m)
TIME STAMP INFORMATION 252

FIG. 1

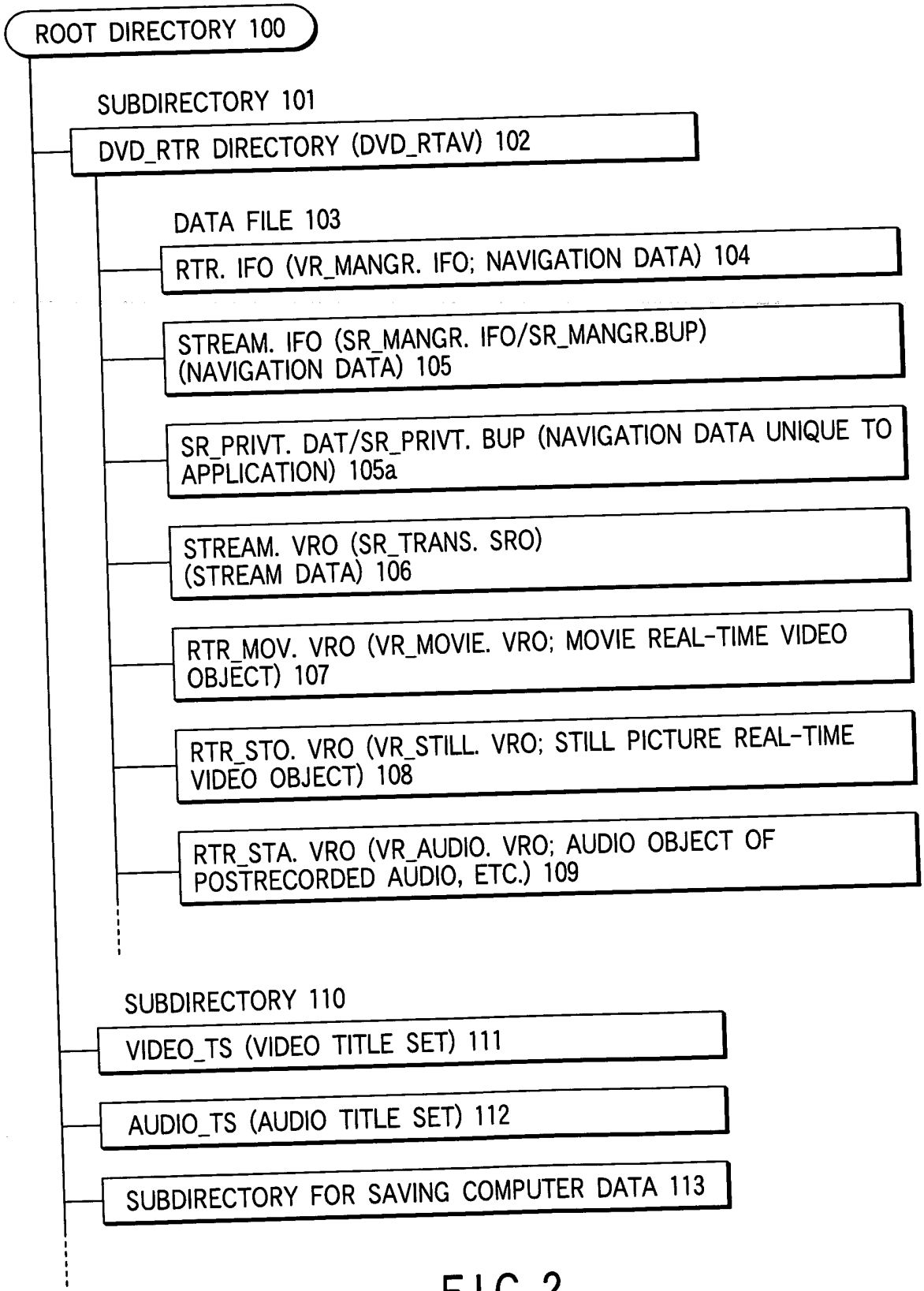
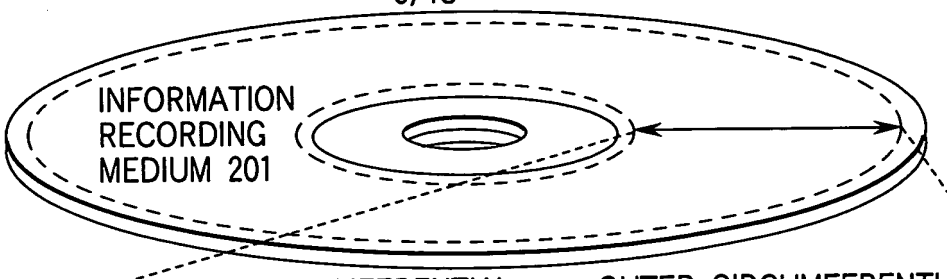

ROOT DIRECTORY 100
SUBDIRECTORY 101
DVD_RTR DIRECTORY (DVD_RTAV) 102
DATA FILE 103
RTR. IFO (VR_MANGR. IFO; NAVIGATION DATA) 104
STREAM. IFO (SR_MANGR. IFO/SR_MANGR.BUP) (NAVIGATION DATA) 105
SR_PRIVT. DAT/SR_PRIVT. BUP (NAVIGATION DATA UNIQUE TO APPLICATION) 105a
STREAM. VRO (SR_TRANS. SRO) (STREAM DATA) 106
RTR_MOV. VRO (VR_MOVIE. VRO; MOVIE REAL-TIME VIDEO OBJECT) 107
RTR_STO. VRO (VR_STILL. VRO; STILL PICTURE REAL-TIME VIDEO OBJECT) 108
RTR_STA. VRO (VR_AUDIO. VRO; AUDIO OBJECT OF POSTRECORDED AUDIO, ETC.) 109
SUBDIRECTORY 110
VIDEO_TS (VIDEO TITLE SET) 111
AUDIO_TS (AUDIO TITLE SET) 112
SUBDIRECTORY FOR SAVING COMPUTER DATA 113

FIG. 2



←INNER CIRCUMFERENTIAL DIRECTION 202 OUTER CIRCUMFERENTIAL→ DIRECTION 203

(b)	LEAD-IN AREA (EMBOSS/ REWRITABLE DATA ZONE) 204	VOLUME & FILE STRUCTURE INFORMATION (REWRITABLE DATA ZONE) 206	DATA AREA (REWRITABLE DATA ZONE) 207	LEAD-OUT AREA (REWRITABLE DATA ZONE) 205
(c)	COMPUTER DATA AREA 208	AUDIO & VIDEO DATA AREA 210	COMPUTER DATA AREA 209	
(d)	REAL-TIME VIDEO RECORDING AREA 221	STREAM RECORDING AREA 222		
(e)	RTR. IFO 104	RTR_MOV. VRO 107	RTR_STO. VRO 108	RTR_STA. VRO 109	STREAM. IFO 105	STRAM. VRO 106
(f)	VIDEO MANAGER (VMGI/STR_VMGI) 231	STREAM FILE INFORMA-TION TABLE (SFIT) 232	ORIGINAL PGC INFORMATION (ORG_PGCI) 233	USER-DEFINED PGC INFOR-MATION TABLE (UD_PGCIT) 234	TEXT DATA MANAGER (TXTDT_MG) 235	MANUFAC-TURER INFORMATION TABLE (MNFIT/APDT_MG) 236
(g)	STREAM FILE INFORMATION TABLE INFORMATION (SFITI) 241	STREAM OBJECT INFOR-MATION (SOBI) #A·242	STREAM OBJECT INFOR-MATION (SOBI) #B·243	...	ORIGINAL PGC GENERAL INFOR-MATION 271	ORIGINAL CELL INFOR-MATION (SCI) #1·272	ORIGINAL CELL INFOR-MATION (SCI) #2·273	...
(h)	STREAM OBJECT GENERAL INFORMATION (SOBI_GI) 251	TIME MAP INFOR-MATION 252	...	CELL TYPE 281	CELL ID 282	CORRES-PONDING CELL START TIME 283	CORRES-PONDING CELL END TIME 284	ENTRY POINT INFORMATION (SC_EPI) 285
(i)	STREAM BLOCK NUMBER 260	FIRST STREAM BLOCK SIZE 261	SECOND STREAM BLOCK SIZE 262	...	FIRST STREAM BLOCK TIME DIFFERENCE 266	SECOND STREAM BLOCK TIME DIFFERENCE 267	...

FIG. 3

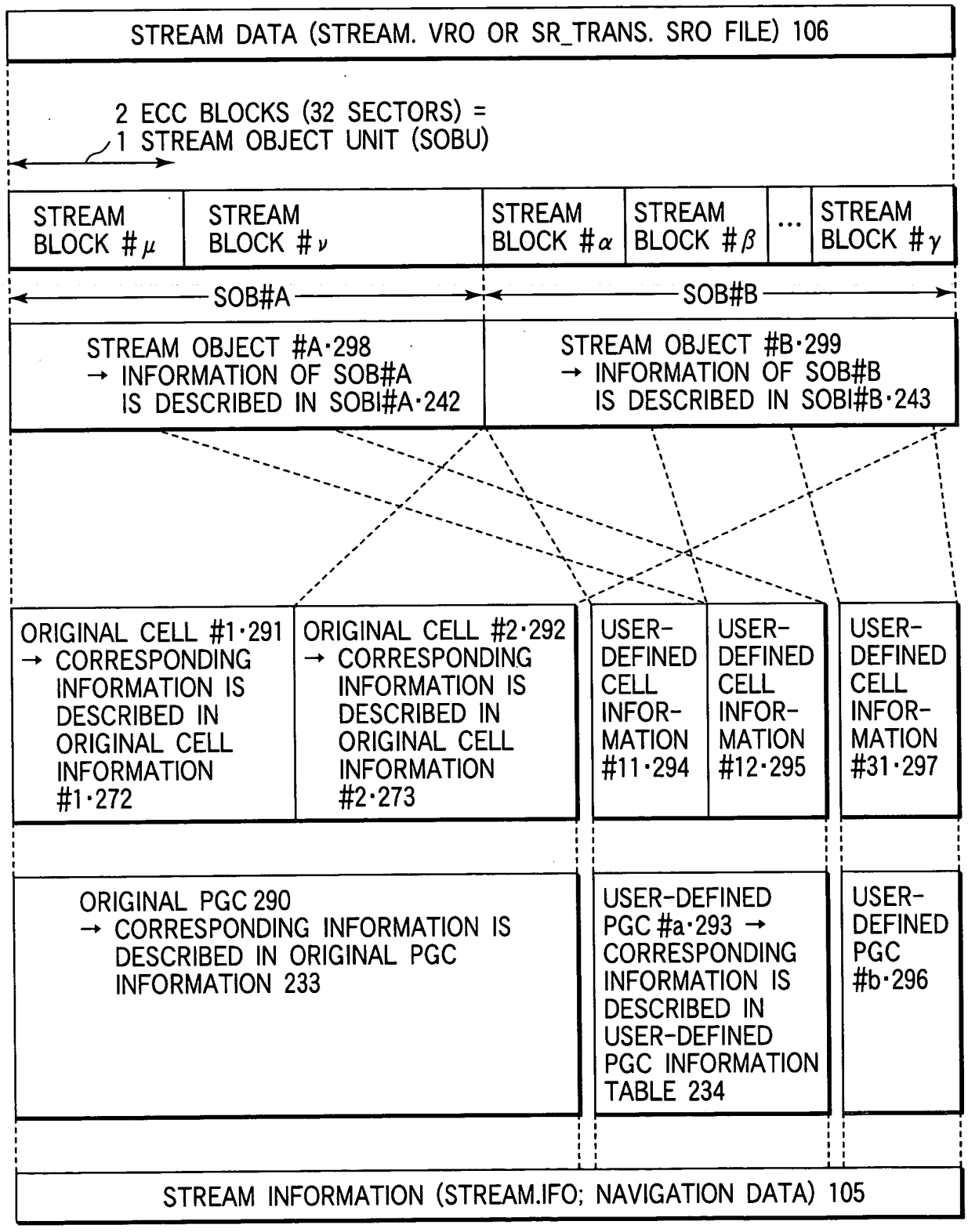

STREAM DATA (STREAM. VRO OR SR_TRANS. SRO FILE) 106
2 ECC BLOCKS (32 SECTORS) = 1 STREAM OBJECT UNIT (SOBU)
STREAM BLOCK #μ
STREAM BLOCK #ν
STREAM BLOCK #α
STREAM BLOCK #β
...
STREAM BLOCK #γ
SOB#A
SOB#B
STREAM OBJECT #A·298 → INFORMATION OF SOB#A IS DESCRIBED IN SOBI#A·242
STREAM OBJECT #B·299 → INFORMATION OF SOB#B IS DESCRIBED IN SOBI#B·243
ORIGINAL CELL #1·291 → CORRESPONDING INFORMATION IS DESCRIBED IN ORIGINAL CELL INFORMATION #1·272
ORIGINAL CELL #2·292 → CORRESPONDING INFORMATION IS DESCRIBED IN ORIGINAL CELL INFORMATION #2·273
USER-DEFINED CELL INFOR-MATION #11·294
USER-DEFINED CELL INFOR-MATION #12·295
USER-DEFINED CELL INFOR-MATION #31·297
ORIGINAL PGC 290 → CORRESPONDING INFORMATION IS DESCRIBED IN ORIGINAL PGC INFORMATION 233
USER-DEFINED PGC #a·293 → CORRESPONDING INFORMATION IS DESCRIBED IN USER-DEFINED PGC INFORMATION TABLE 234
USER-DEFINED PGC #b·296
STREAM INFORMATION (STREAM.IFO; NAVIGATION DATA) 105

FIG. 4

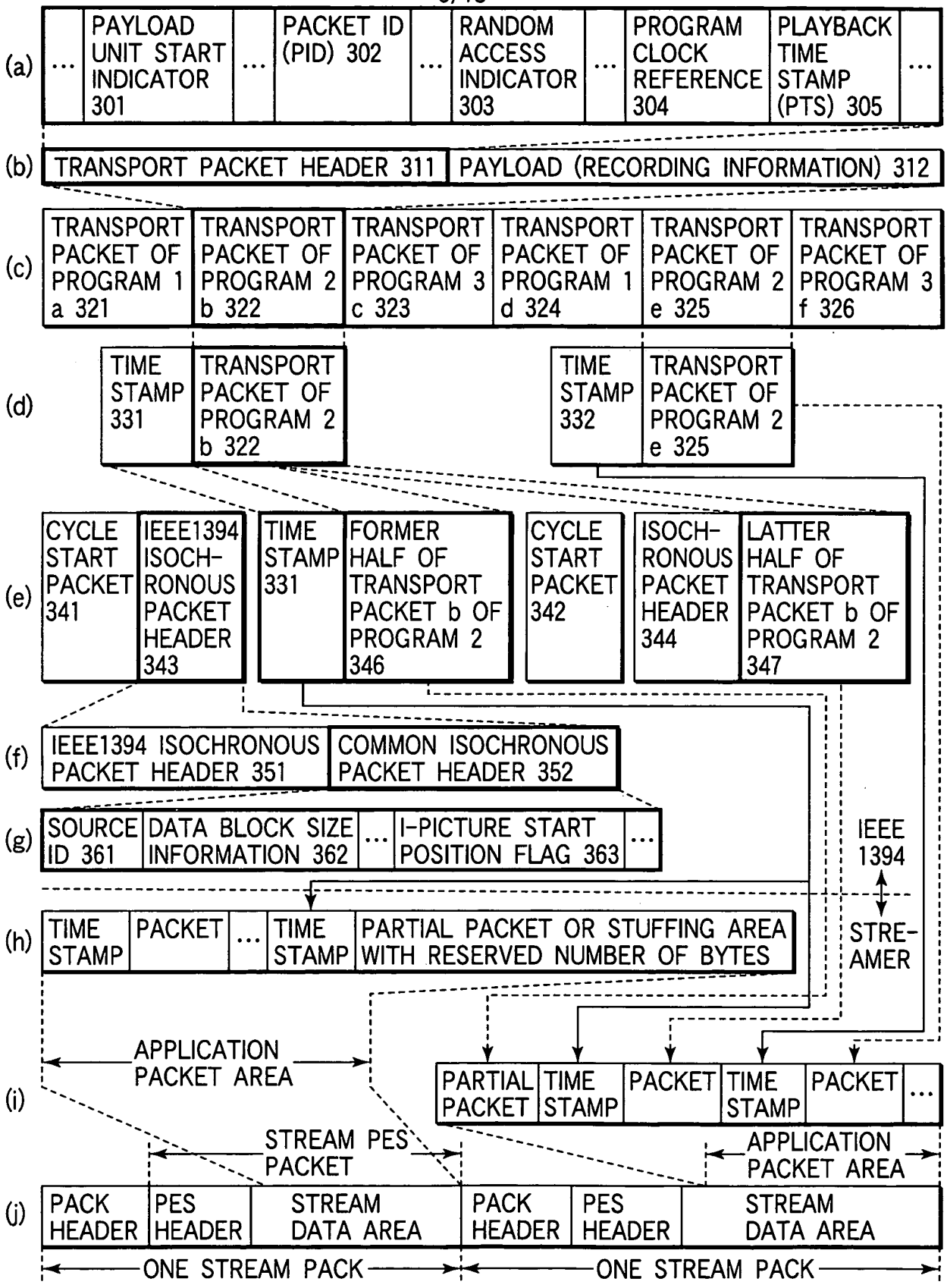

(a)
... PAYLOAD UNIT START INDICATOR 301 ... PACKET ID (PID) 302 ... RANDOM ACCESS INDICATOR 303 ... PROGRAM CLOCK REFERENCE 304 PLAYBACK TIME STAMP (PTS) 305 ...
(b)
TRANSPORT PACKET HEADER 311
PAYLOAD (RECORDING INFORMATION) 312
(c)
TRANSPORT PACKET OF PROGRAM 1 a 321
TRANSPORT PACKET OF PROGRAM 2 b 322
TRANSPORT PACKET OF PROGRAM 3 c 323
TRANSPORT PACKET OF PROGRAM 1 d 324
TRANSPORT PACKET OF PROGRAM 2 e 325
TRANSPORT PACKET OF PROGRAM 3 f 326
(d)
TIME STAMP 331
TRANSPORT PACKET OF PROGRAM 2 b 322
TIME STAMP 332
TRANSPORT PACKET OF PROGRAM 2 e 325
(e)
CYCLE START PACKET 341
IEEE1394 ISOCHRONOUS PACKET HEADER 343
TIME STAMP 331
FORMER HALF OF TRANSPORT PACKET b OF PROGRAM 2 346
CYCLE START PACKET 342
ISOCHRONOUS PACKET HEADER 344
LATTER HALF OF TRANSPORT PACKET b OF PROGRAM 2 347
(f)
IEEE1394 ISOCHRONOUS PACKET HEADER 351
COMMON ISOCHRONOUS PACKET HEADER 352
(g)
SOURCE ID 361
DATA BLOCK SIZE INFORMATION 362
... I-PICTURE START POSITION FLAG 363 ...
IEEE 1394
(h)
TIME STAMP
PACKET
... TIME STAMP
PARTIAL PACKET OR STUFFING AREA WITH RESERVED NUMBER OF BYTES
STRE-AMER
APPLICATION PACKET AREA
(i)
PARTIAL PACKET
TIME STAMP
PACKET
TIME STAMP
PACKET ...
STREAM PES PACKET
APPLICATION PACKET AREA
(j)
PACK HEADER
PES HEADER
STREAM DATA AREA
PACK HEADER
PES HEADER
STREAM DATA AREA
ONE STREAM PACK
ONE STREAM PACK

FIG. 5

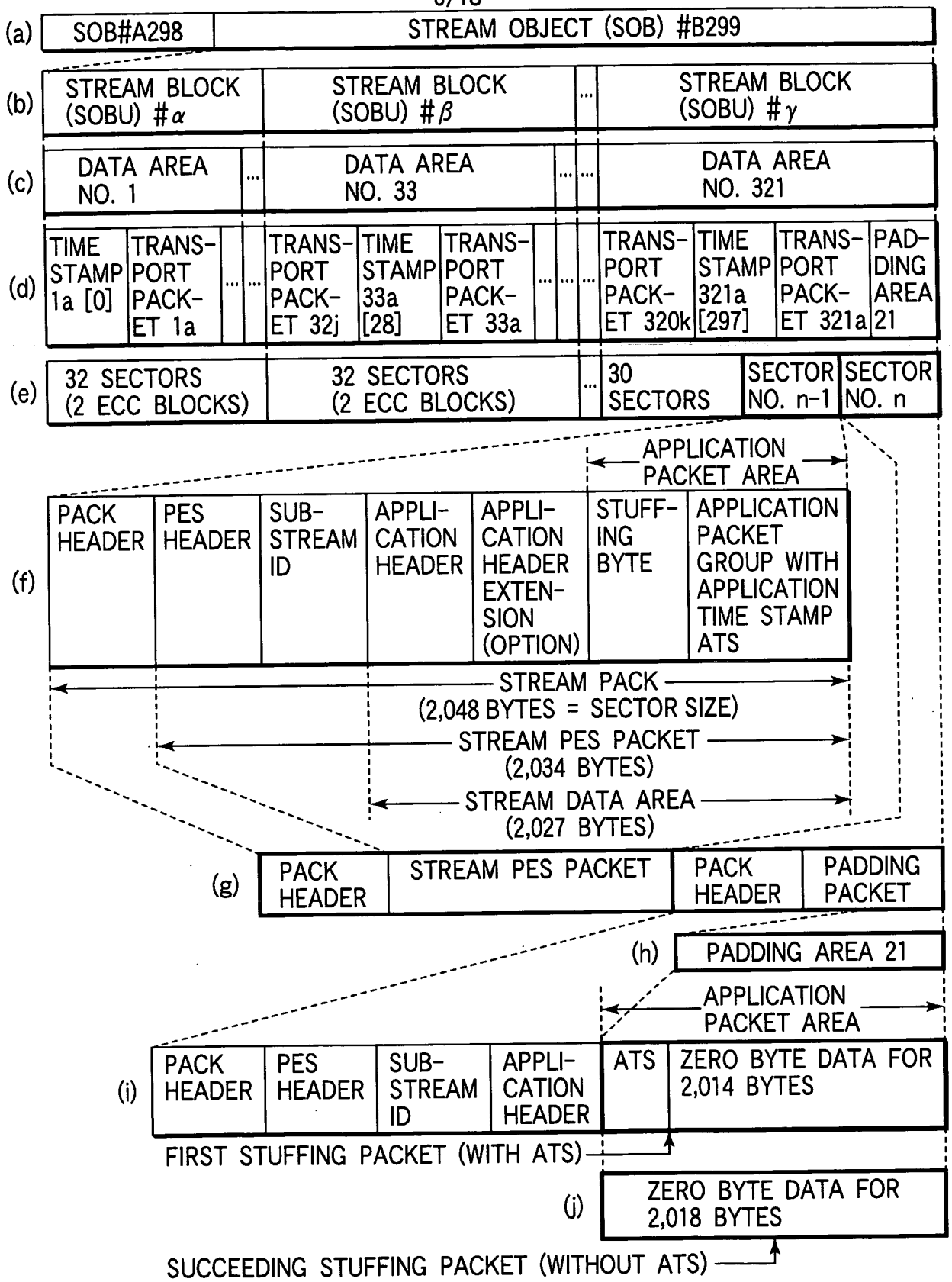

(a)
SOB#A298
STREAM OBJECT (SOB) #B299
(b)
STREAM BLOCK (SOBU) #α
STREAM BLOCK (SOBU) #β
STREAM BLOCK (SOBU) #γ
(c)
DATA AREA NO. 1
DATA AREA NO. 33
DATA AREA NO. 321
(d)
TIME STAMP 1a [0]
TRANS-PORT PACK-ET 1a
TRANS-PORT PACK-ET 32j
TIME STAMP 33a [28]
TRANS-PORT PACK-ET 33a
TRANS-PORT PACK-ET 320k
TIME STAMP 321a [297]
TRANS-PORT PACK-ET 321a
PAD-DING AREA 21
(e)
32 SECTORS (2 ECC BLOCKS)
32 SECTORS (2 ECC BLOCKS)
30 SECTORS
SECTOR NO. n-1
SECTOR NO. n
APPLICATION PACKET AREA
(f)
PACK HEADER
PES HEADER
SUB-STREAM ID
APPLI-CATION HEADER
APPLI-CATION HEADER EXTEN-SION (OPTION)
STUFF-ING BYTE
APPLICATION PACKET GROUP WITH APPLICATION TIME STAMP ATS
STREAM PACK (2,048 BYTES = SECTOR SIZE)
STREAM PES PACKET (2,034 BYTES)
STREAM DATA AREA (2,027 BYTES)
(g)
PACK HEADER
STREAM PES PACKET
PACK HEADER
PADDING PACKET
(h)
PADDING AREA 21
APPLICATION PACKET AREA
(i)
PACK HEADER
PES HEADER
SUB-STREAM ID
APPLI-CATION HEADER
ATS
ZERO BYTE DATA FOR 2,014 BYTES
FIRST STUFFING PACKET (WITH ATS)
(j)
ZERO BYTE DATA FOR 2,018 BYTES
SUCCEEDING STUFFING PACKET (WITHOUT ATS)

FIG. 6

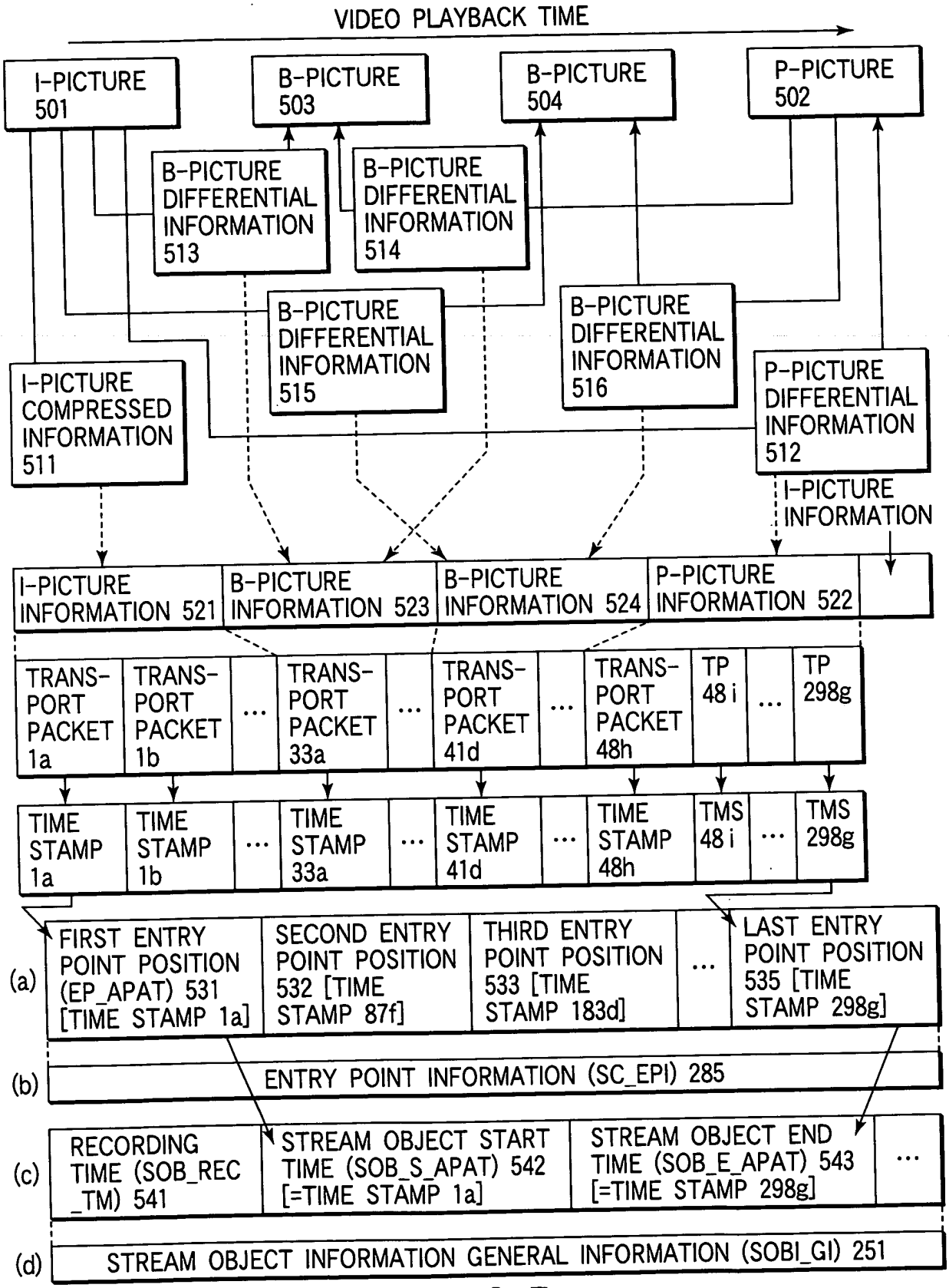

VIDEO PLAYBACK TIME
I-PICTURE 501
B-PICTURE 503
B-PICTURE 504
P-PICTURE 502
B-PICTURE DIFFERENTIAL INFORMATION 513
B-PICTURE DIFFERENTIAL INFORMATION 514
B-PICTURE DIFFERENTIAL INFORMATION 515
B-PICTURE DIFFERENTIAL INFORMATION 516
I-PICTURE COMPRESSED INFORMATION 511
P-PICTURE DIFFERENTIAL INFORMATION 512
I-PICTURE INFORMATION
I-PICTURE INFORMATION 521
B-PICTURE INFORMATION 523
B-PICTURE INFORMATION 524
P-PICTURE INFORMATION 522
TRANS-PORT PACKET 1a
TRANS-PORT PACKET 1b
TRANS-PORT PACKET 33a
TRANS-PORT PACKET 41d
TRANS-PORT PACKET 48h
TP 48 i
TP 298g
TIME STAMP 1a
TIME STAMP 1b
TIME STAMP 33a
TIME STAMP 41d
TIME STAMP 48h
TMS 48 i
TMS 298g
(a)
FIRST ENTRY POINT POSITION (EP_APAT) 531 [TIME STAMP 1a]
SECOND ENTRY POINT POSITION 532 [TIME STAMP 87f]
THIRD ENTRY POINT POSITION 533 [TIME STAMP 183d]
LAST ENTRY POINT POSITION 535 [TIME STAMP 298g]
(b)
ENTRY POINT INFORMATION (SC_EPI) 285
(c)
RECORDING TIME (SOB_REC _TM) 541
STREAM OBJECT START TIME (SOB_S_APAT) 542 [=TIME STAMP 1a]
STREAM OBJECT END TIME (SOB_E_APAT) 543 [=TIME STAMP 298g]
(d)
STREAM OBJECT INFORMATION GENERAL INFORMATION (SOBI_GI) 251

FIG. 7

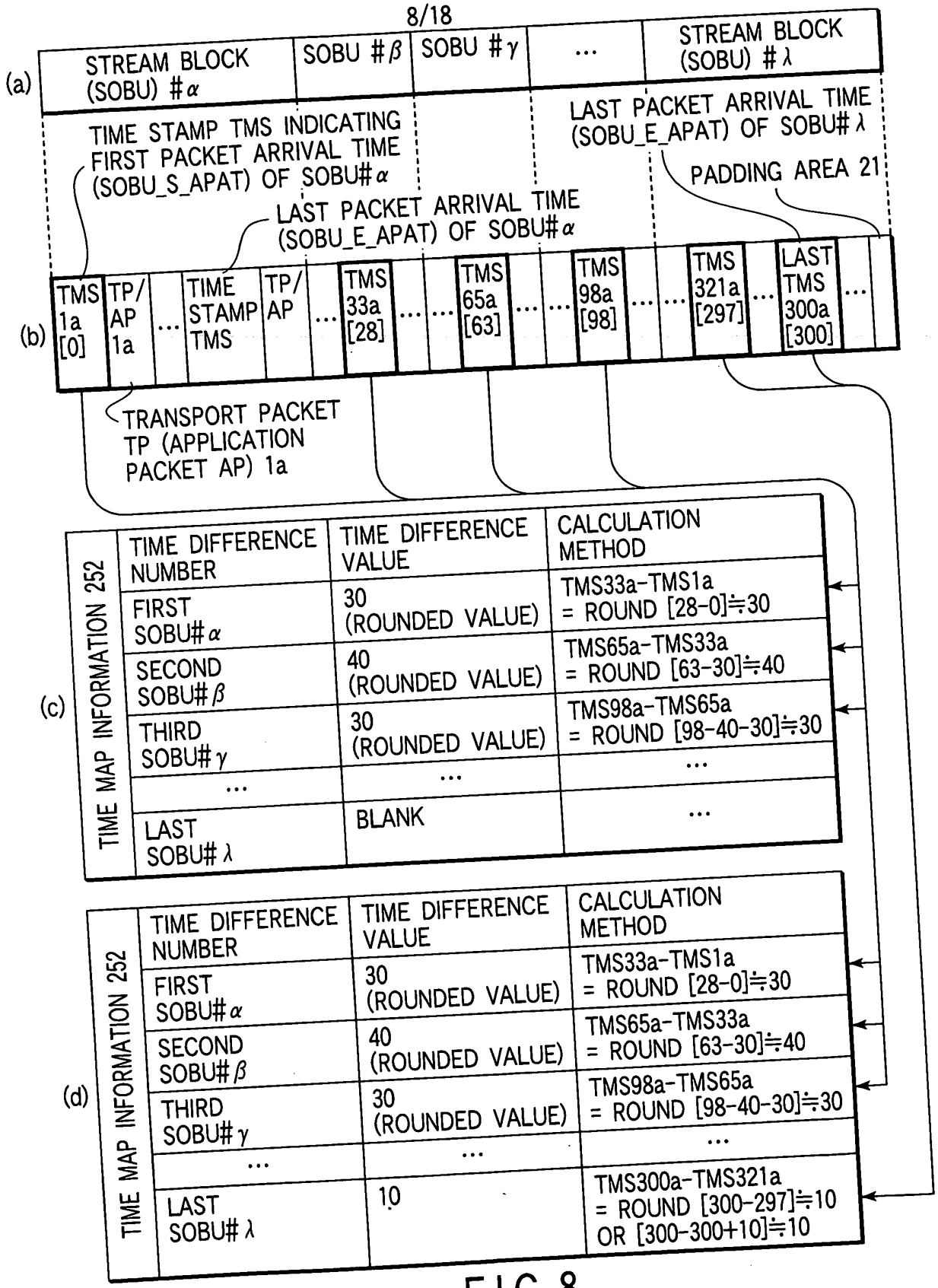

(a)
STREAM BLOCK (SOBU) #α
SOBU #β
SOBU #γ
...
STREAM BLOCK (SOBU) #λ
TIME STAMP TMS INDICATING FIRST PACKET ARRIVAL TIME (SOBU_S_APAT) OF SOBU#α
LAST PACKET ARRIVAL TIME (SOBU_E_APAT) OF SOBU#λ
PADDING AREA 21
LAST PACKET ARRIVAL TIME (SOBU_E_APAT) OF SOBU#α
(b)
TMS 1a [0]
TP/ AP 1a
TIME STAMP TMS
TP/ AP
TMS 33a [28]
TMS 65a [63]
TMS 98a [98]
TMS 321a [297]
LAST TMS 300a [300]
TRANSPORT PACKET TP (APPLICATION PACKET AP) 1a
(c)
TIME MAP INFORMATION 252
TIME DIFFERENCE NUMBER
TIME DIFFERENCE VALUE
CALCULATION METHOD
FIRST SOBU#α
30 (ROUNDED VALUE)
TMS33a-TMS1a = ROUND [28-0]≒30
SECOND SOBU#β
40 (ROUNDED VALUE)
TMS65a-TMS33a = ROUND [63-30]≒40
THIRD SOBU#γ
30 (ROUNDED VALUE)
TMS98a-TMS65a = ROUND [98-40-30]≒30
LAST SOBU#λ
BLANK
(d)
TIME MAP INFORMATION 252
TIME DIFFERENCE NUMBER
TIME DIFFERENCE VALUE
CALCULATION METHOD
FIRST SOBU#α
30 (ROUNDED VALUE)
TMS33a-TMS1a = ROUND [28-0]≒30
SECOND SOBU#β
40 (ROUNDED VALUE)
TMS65a-TMS33a = ROUND [63-30]≒40
THIRD SOBU#γ
30 (ROUNDED VALUE)
TMS98a-TMS65a = ROUND [98-40-30]≒30
LAST SOBU#λ
10
TMS300a-TMS321a = ROUND [300-297]≒10 OR [300-300+10]≒10

FIG. 8

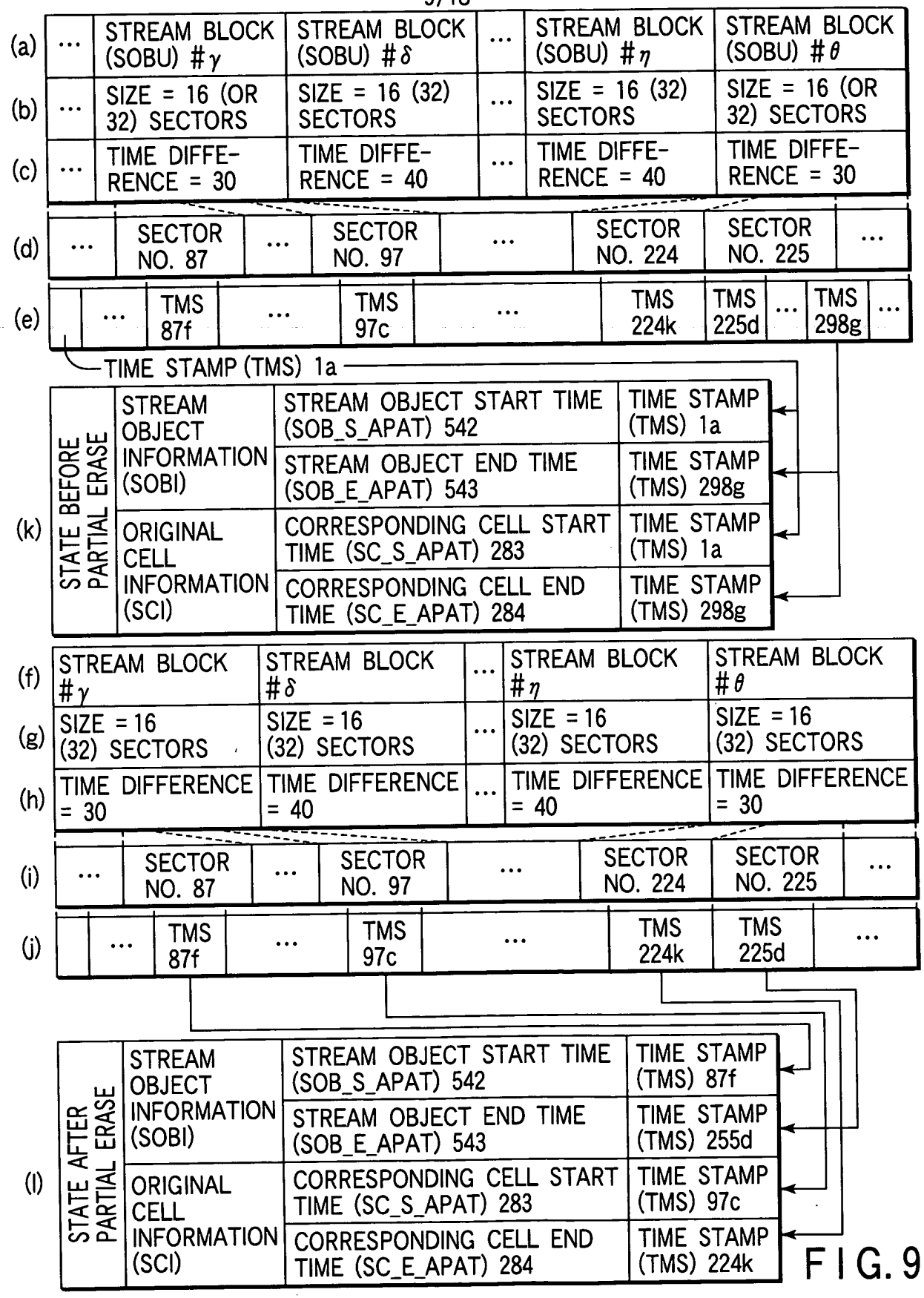

(a) ... STREAM BLOCK (SOBU) #γ | STREAM BLOCK (SOBU) #δ | ... | STREAM BLOCK (SOBU) #η | STREAM BLOCK (SOBU) #θ
(b) ... SIZE = 16 (OR 32) SECTORS | SIZE = 16 (32) SECTORS | ... | SIZE = 16 (32) SECTORS | SIZE = 16 (OR 32) SECTORS
(c) ... TIME DIFFERENCE = 30 | TIME DIFFERENCE = 40 | ... | TIME DIFFERENCE = 40 | TIME DIFFERENCE = 30
(d) ... SECTOR NO. 87 | ... | SECTOR NO. 97 | ... | SECTOR NO. 224 | SECTOR NO. 225 | ...
(e) ... TMS 87f | ... | TMS 97c | ... | TMS 224k | TMS 225d | ... | TMS 298g | ...
TIME STAMP (TMS) 1a
(k) STATE BEFORE PARTIAL ERASE
STREAM OBJECT INFORMATION (SOBI)
STREAM OBJECT START TIME (SOB_S_APAT) 542 | TIME STAMP (TMS) 1a
STREAM OBJECT END TIME (SOB_E_APAT) 543 | TIME STAMP (TMS) 298g
ORIGINAL CELL INFORMATION (SCI)
CORRESPONDING CELL START TIME (SC_S_APAT) 283 | TIME STAMP (TMS) 1a
CORRESPONDING CELL END TIME (SC_E_APAT) 284 | TIME STAMP (TMS) 298g
(f) STREAM BLOCK #γ | STREAM BLOCK #δ | ... | STREAM BLOCK #η | STREAM BLOCK #θ
(g) SIZE = 16 (32) SECTORS | SIZE = 16 (32) SECTORS | ... | SIZE = 16 (32) SECTORS | SIZE = 16 (32) SECTORS
(h) TIME DIFFERENCE = 30 | TIME DIFFERENCE = 40 | ... | TIME DIFFERENCE = 40 | TIME DIFFERENCE = 30
(i) ... SECTOR NO. 87 | ... | SECTOR NO. 97 | ... | SECTOR NO. 224 | SECTOR NO. 225 | ...
(j) ... TMS 87f | ... | TMS 97c | ... | TMS 224k | TMS 225d | ...
(l) STATE AFTER PARTIAL ERASE
STREAM OBJECT INFORMATION (SOBI)
STREAM OBJECT START TIME (SOB_S_APAT) 542 | TIME STAMP (TMS) 87f
STREAM OBJECT END TIME (SOB_E_APAT) 543 | TIME STAMP (TMS) 255d
ORIGINAL CELL INFORMATION (SCI)
CORRESPONDING CELL START TIME (SC_S_APAT) 283 | TIME STAMP (TMS) 97c
CORRESPONDING CELL END TIME (SC_E_APAT) 284 | TIME STAMP (TMS) 224k

FIG. 9

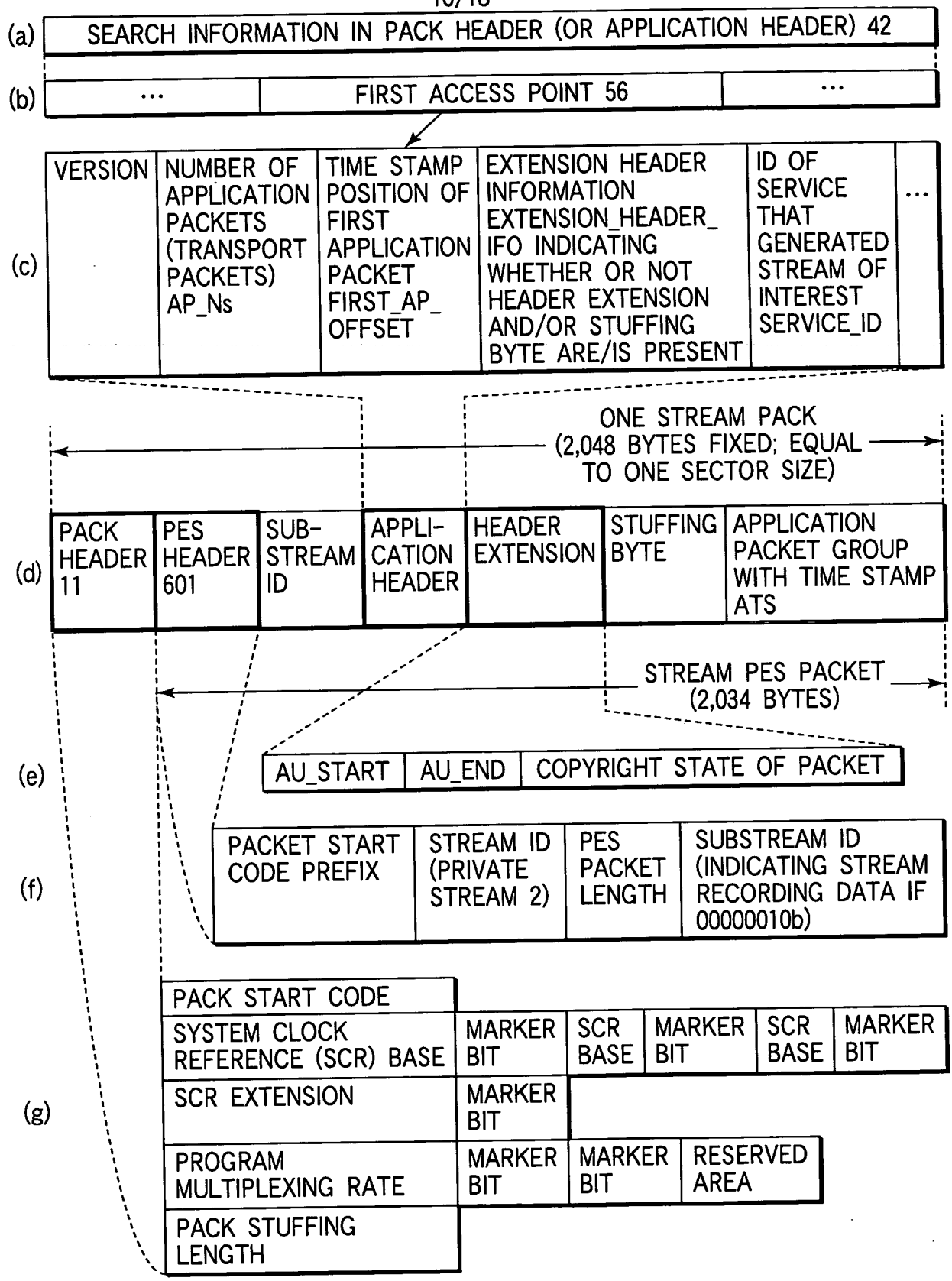


FIG. 10

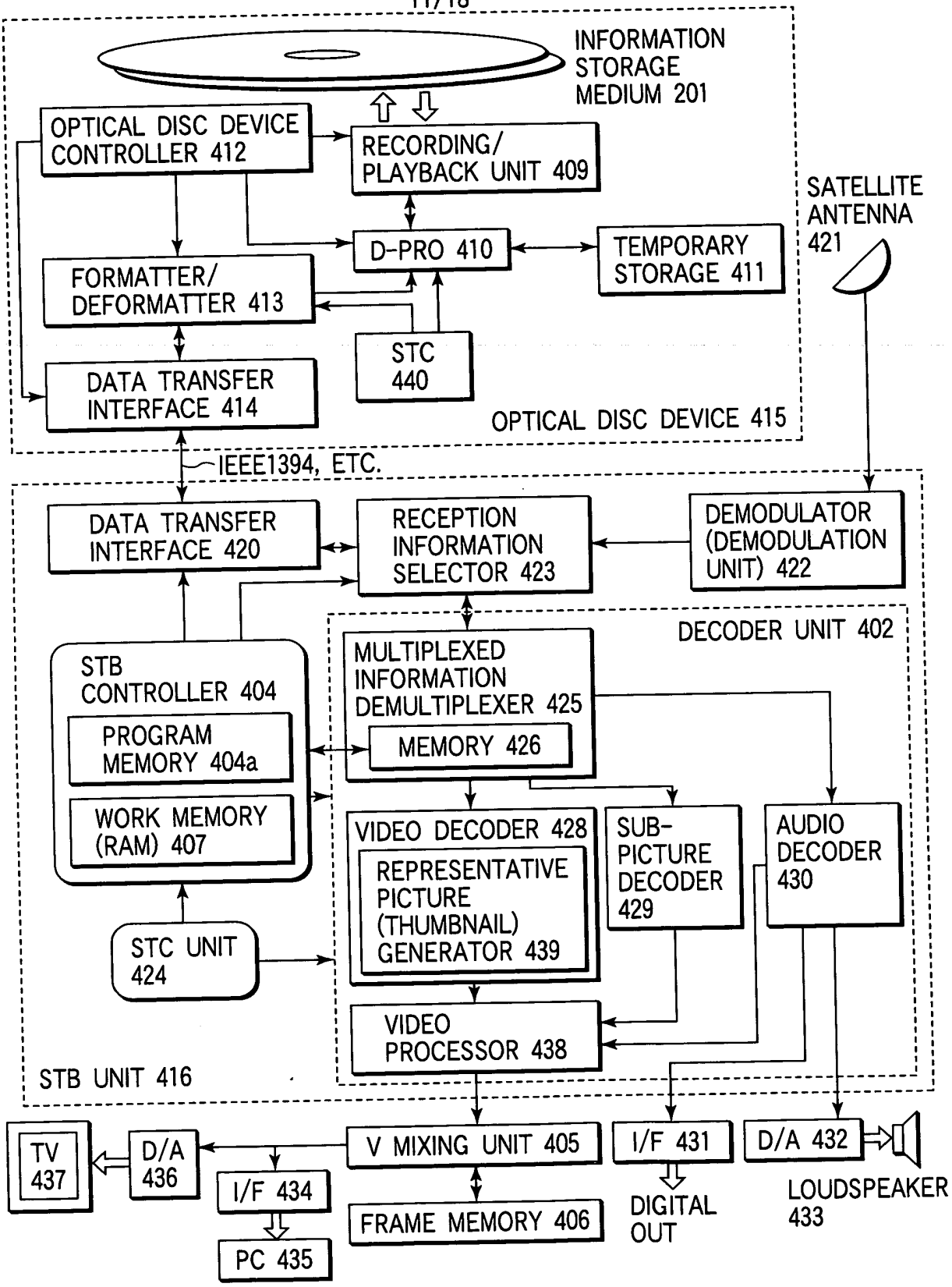

INFORMATION STORAGE MEDIUM 201
OPTICAL DISC DEVICE CONTROLLER 412
RECORDING/ PLAYBACK UNIT 409
SATELLITE ANTENNA 421
D-PRO 410
TEMPORARY STORAGE 411
FORMATTER/ DEFORMATTER 413
STC 440
DATA TRANSFER INTERFACE 414
OPTICAL DISC DEVICE 415
IEEE1394, ETC.
DATA TRANSFER INTERFACE 420
RECEPTION INFORMATION SELECTOR 423
DEMODULATOR (DEMODULATION UNIT) 422
DECODER UNIT 402
STB CONTROLLER 404
PROGRAM MEMORY 404a
WORK MEMORY (RAM) 407
MULTIPLEXED INFORMATION DEMULTIPLEXER 425
MEMORY 426
VIDEO DECODER 428
REPRESENTATIVE PICTURE (THUMBNAIL) GENERATOR 439
SUB-PICTURE DECODER 429
AUDIO DECODER 430
STC UNIT 424
VIDEO PROCESSOR 438
STB UNIT 416
TV 437
D/A 436
V MIXING UNIT 405
I/F 431
D/A 432
I/F 434
FRAME MEMORY 406
DIGITAL OUT
LOUDSPEAKER 433
PC 435

FIG. 11

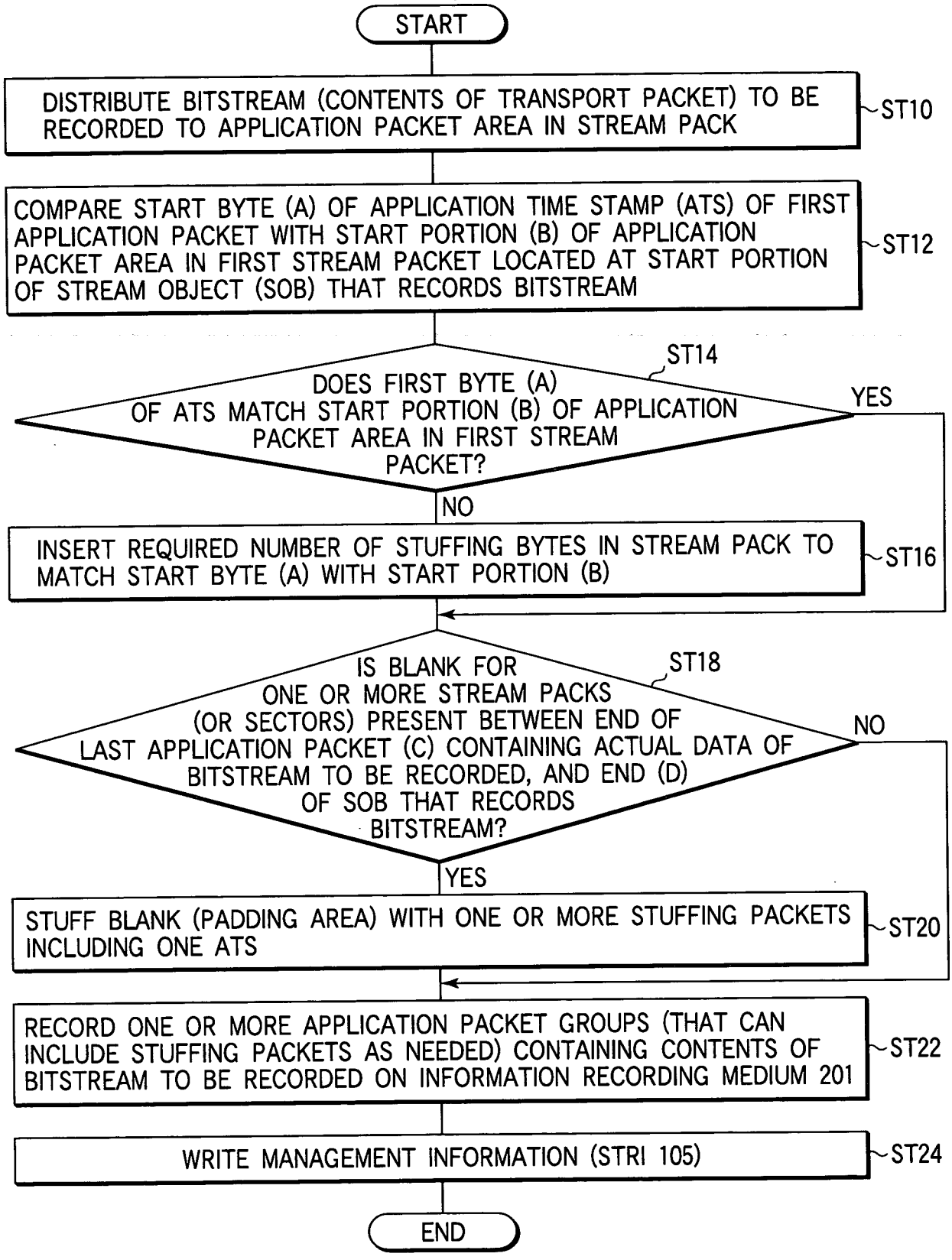

START
DISTRIBUTE BITSTREAM (CONTENTS OF TRANSPORT PACKET) TO BE RECORDED TO APPLICATION PACKET AREA IN STREAM PACK
ST10
COMPARE START BYTE (A) OF APPLICATION TIME STAMP (ATS) OF FIRST APPLICATION PACKET WITH START PORTION (B) OF APPLICATION PACKET AREA IN FIRST STREAM PACKET LOCATED AT START PORTION OF STREAM OBJECT (SOB) THAT RECORDS BITSTREAM
ST12
ST14
DOES FIRST BYTE (A) OF ATS MATCH START PORTION (B) OF APPLICATION PACKET AREA IN FIRST STREAM PACKET?
YES
NO
INSERT REQUIRED NUMBER OF STUFFING BYTES IN STREAM PACK TO MATCH START BYTE (A) WITH START PORTION (B)
ST16
ST18
IS BLANK FOR ONE OR MORE STREAM PACKS (OR SECTORS) PRESENT BETWEEN END OF LAST APPLICATION PACKET (C) CONTAINING ACTUAL DATA OF BITSTREAM TO BE RECORDED, AND END (D) OF SOB THAT RECORDS BITSTREAM?
NO
YES
STUFF BLANK (PADDING AREA) WITH ONE OR MORE STUFFING PACKETS INCLUDING ONE ATS
ST20
RECORD ONE OR MORE APPLICATION PACKET GROUPS (THAT CAN INCLUDE STUFFING PACKETS AS NEEDED) CONTAINING CONTENTS OF BITSTREAM TO BE RECORDED ON INFORMATION RECORDING MEDIUM 201
ST22
WRITE MANAGEMENT INFORMATION (STRI 105)
ST24
END

FIG. 12

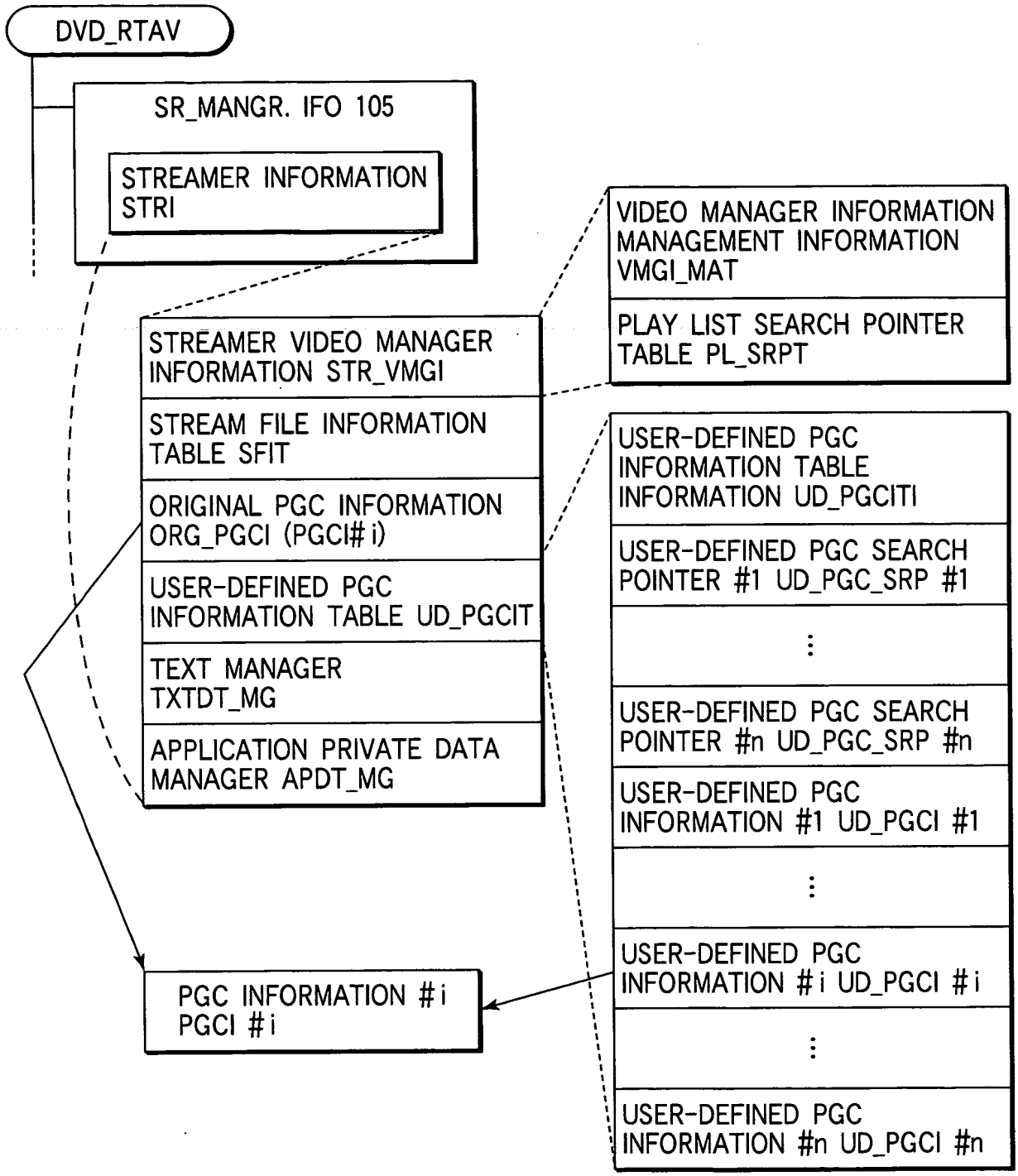

DVD_RTAV
SR_MANGR. IFO 105
STREAMER INFORMATION STRI
STREAMER VIDEO MANAGER INFORMATION STR_VMGI
STREAM FILE INFORMATION TABLE SFIT
ORIGINAL PGC INFORMATION ORG_PGCI (PGCI# i)
USER-DEFINED PGC INFORMATION TABLE UD_PGCIT
TEXT MANAGER TXTDT_MG
APPLICATION PRIVATE DATA MANAGER APDT_MG
PGC INFORMATION #i PGCI #i
VIDEO MANAGER INFORMATION MANAGEMENT INFORMATION VMGI_MAT
PLAY LIST SEARCH POINTER TABLE PL_SRPT
USER-DEFINED PGC INFORMATION TABLE INFORMATION UD_PGCITI
USER-DEFINED PGC SEARCH POINTER #1 UD_PGC_SRP #1
USER-DEFINED PGC SEARCH POINTER #n UD_PGC_SRP #n
USER-DEFINED PGC INFORMATION #1 UD_PGCI #1
USER-DEFINED PGC INFORMATION #i UD_PGCI #i
USER-DEFINED PGC INFORMATION #n UD_PGCI #n

FIG. 13

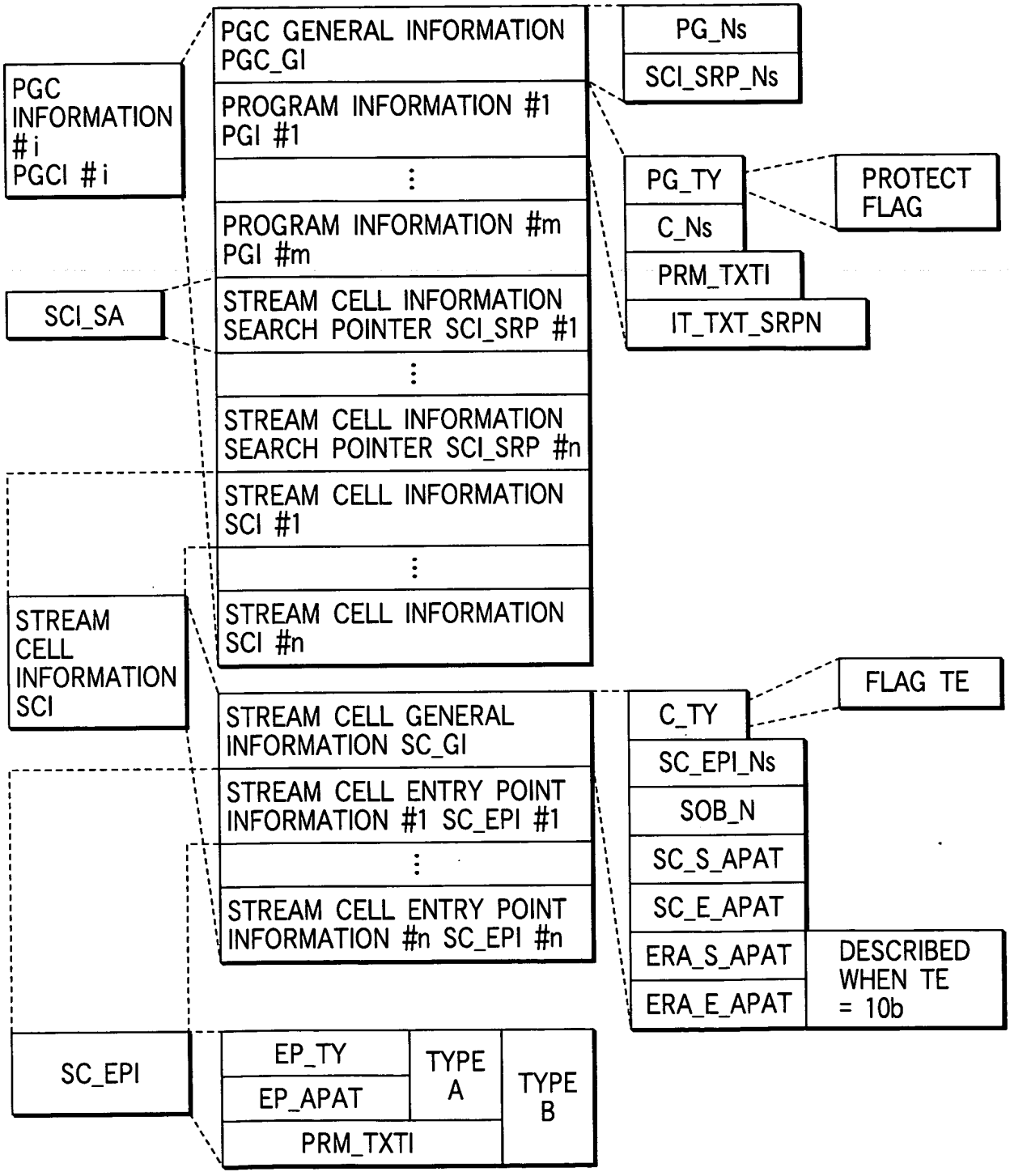

PGC INFORMATION #i PGCI #i
PGC GENERAL INFORMATION PGC_GI
PROGRAM INFORMATION #1 PGI #1
PROGRAM INFORMATION #m PGI #m
PG_Ns
SCI_SRP_Ns
PG_TY
C_Ns
PRM_TXTI
IT_TXT_SRPN
PROTECT FLAG
SCI_SA
STREAM CELL INFORMATION SEARCH POINTER SCI_SRP #1
STREAM CELL INFORMATION SEARCH POINTER SCI_SRP #n
STREAM CELL INFORMATION SCI #1
STREAM CELL INFORMATION SCI #n
STREAM CELL INFORMATION SCI
STREAM CELL GENERAL INFORMATION SC_GI
STREAM CELL ENTRY POINT INFORMATION #1 SC_EPI #1
STREAM CELL ENTRY POINT INFORMATION #n SC_EPI #n
C_TY
SC_EPI_Ns
SOB_N
SC_S_APAT
SC_E_APAT
ERA_S_APAT
ERA_E_APAT
FLAG TE
DESCRIBED WHEN TE = 10b
SC_EPI
EP_TY
EP_APAT
PRM_TXTI
TYPE A
TYPE B

FIG. 14

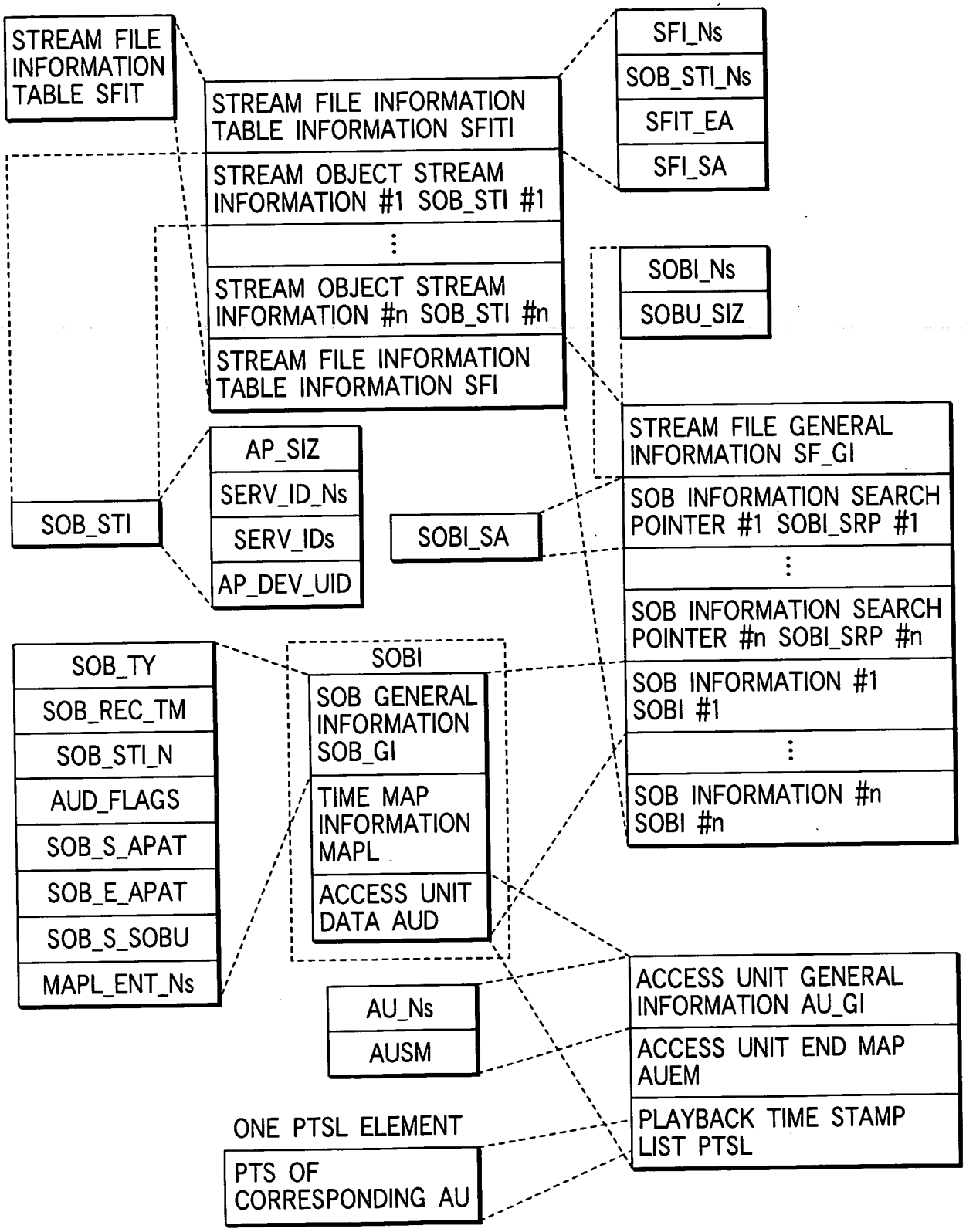

STREAM FILE INFORMATION TABLE SFIT
STREAM FILE INFORMATION TABLE INFORMATION SFITI
STREAM OBJECT STREAM INFORMATION #1 SOB_STI #1
STREAM OBJECT STREAM INFORMATION #n SOB_STI #n
STREAM FILE INFORMATION TABLE INFORMATION SFI
SFI_Ns
SOB_STI_Ns
SFIT_EA
SFI_SA
SOBI_Ns
SOBU_SIZ
SOB_STI
AP_SIZ
SERV_ID_Ns
SERV_IDs
AP_DEV_UID
SOBI_SA
STREAM FILE GENERAL INFORMATION SF_GI
SOB INFORMATION SEARCH POINTER #1 SOBI_SRP #1
SOB INFORMATION SEARCH POINTER #n SOBI_SRP #n
SOB INFORMATION #1 SOBI #1
SOB INFORMATION #n SOBI #n
SOB_TY
SOB_REC_TM
SOB_STI_N
AUD_FLAGS
SOB_S_APAT
SOB_E_APAT
SOB_S_SOBU
MAPL_ENT_Ns
SOBI
SOB GENERAL INFORMATION SOB_GI
TIME MAP INFORMATION MAPL
ACCESS UNIT DATA AUD
AU_Ns
AUSM
ACCESS UNIT GENERAL INFORMATION AU_GI
ACCESS UNIT END MAP AUEM
PLAYBACK TIME STAMP LIST PTSL
ONE PTSL ELEMENT
PTS OF CORRESPONDING AU

FIG. 15

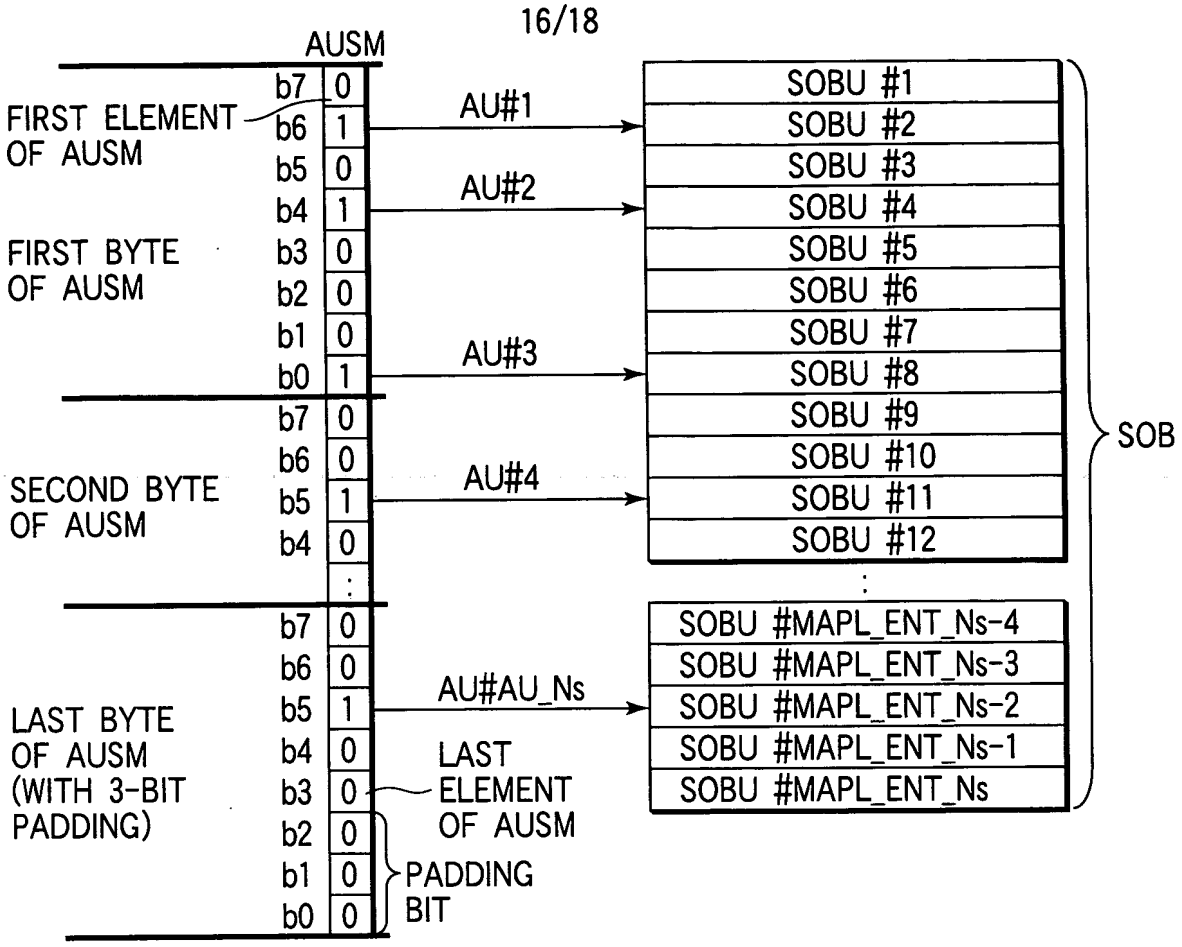

AUSM
FIRST ELEMENT OF AUSM
FIRST BYTE OF AUSM
SECOND BYTE OF AUSM
LAST BYTE OF AUSM (WITH 3-BIT PADDING)
b7
b6
b5
b4
b3
b2
b1
b0
AU#1
AU#2
AU#3
AU#4
AU#AU_Ns
LAST ELEMENT OF AUSM
PADDING BIT
SOBU #1
SOBU #2
SOBU #3
SOBU #4
SOBU #5
SOBU #6
SOBU #7
SOBU #8
SOBU #9
SOBU #10
SOBU #11
SOBU #12
SOBU #MAPL_ENT_Ns-4
SOBU #MAPL_ENT_Ns-3
SOBU #MAPL_ENT_Ns-2
SOBU #MAPL_ENT_Ns-1
SOBU #MAPL_ENT_Ns
SOB

FIG. 16

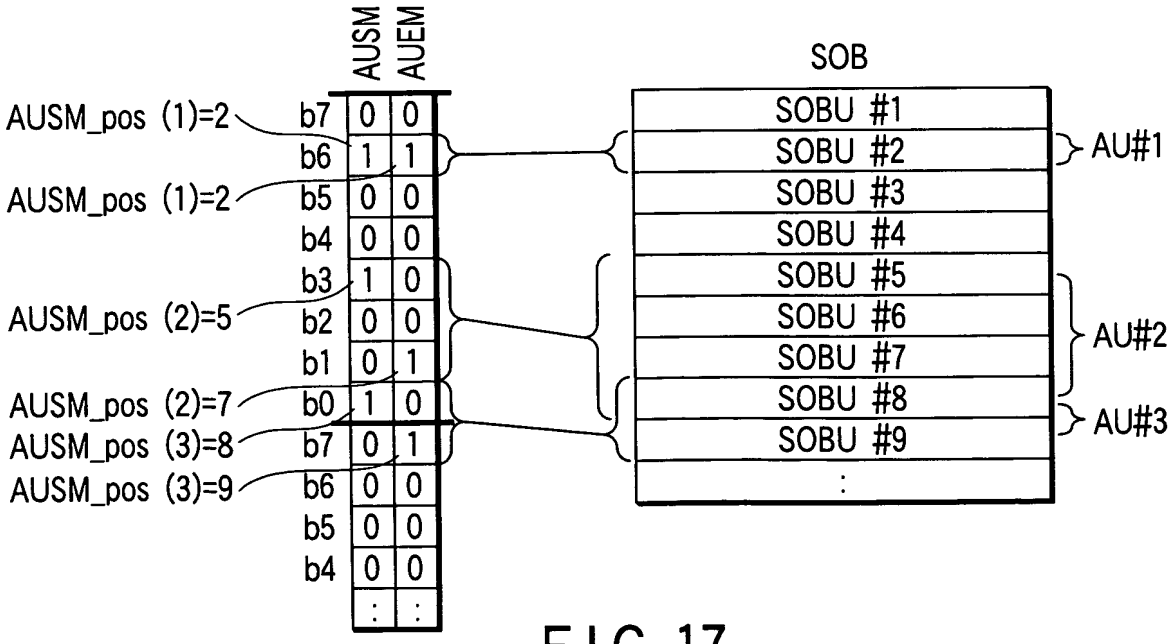

AUSM
AUEM
SOB
AUSM_pos (1)=2
AUSM_pos (1)=2
AUSM_pos (2)=5
AUSM_pos (2)=7
AUSM_pos (3)=8
AUSM_pos (3)=9
SOBU #1
SOBU #2
SOBU #3
SOBU #4
SOBU #5
SOBU #6
SOBU #7
SOBU #8
SOBU #9
AU#1
AU#2
AU#3

FIG. 17

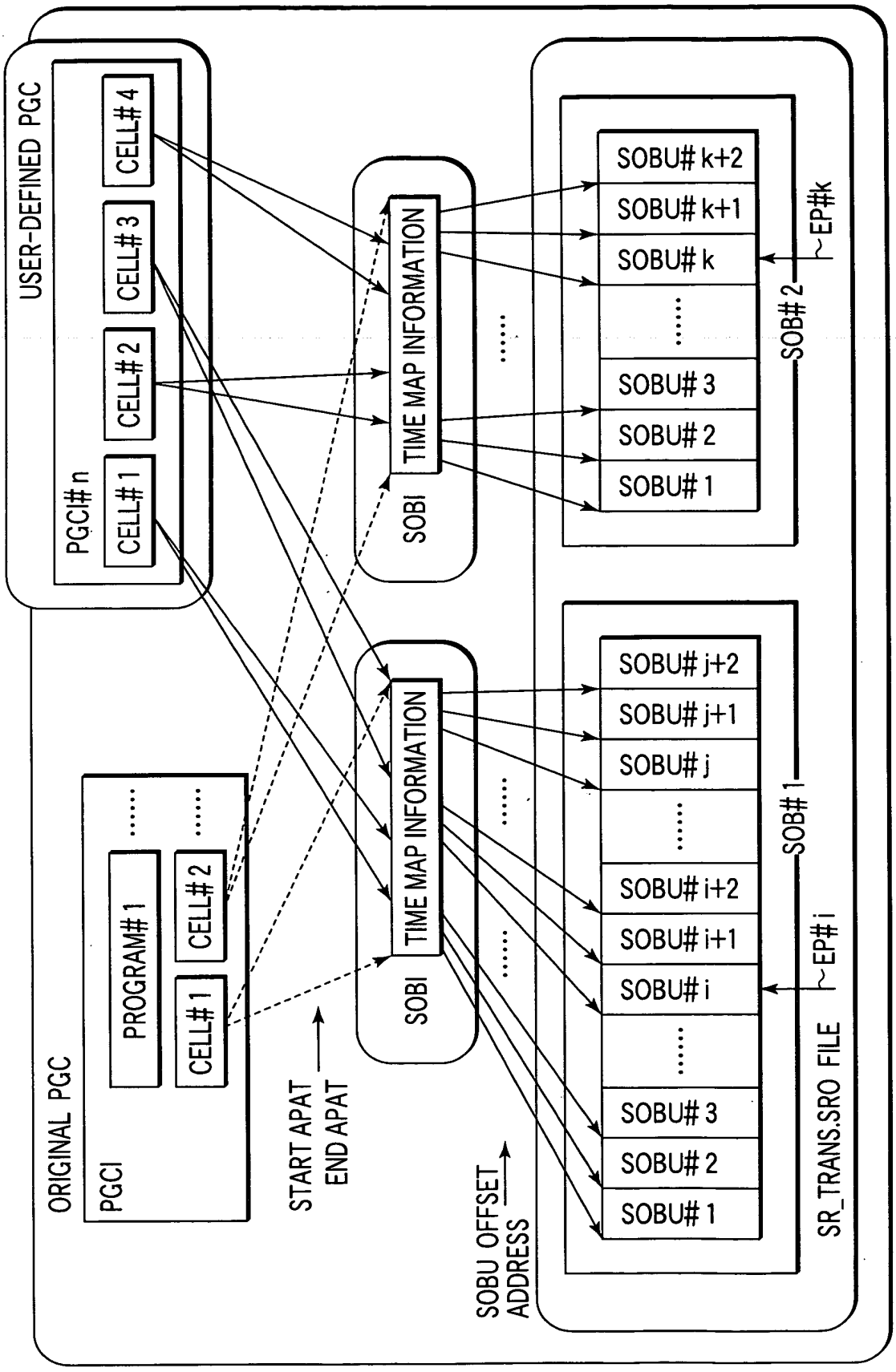

USER-DEFINED PGC
PGCI# n
CELL# 1
CELL# 2
CELL# 3
CELL# 4
SOBI
TIME MAP INFORMATION
SOBU# k+2
SOBU# k+1
SOBU# k
SOBU# 3
SOBU# 2
SOBU# 1
EP#k
SOB# 2
SOBU# j+2
SOBU# j+1
SOBU# j
SOBU# i+2
SOBU# i+1
SOBU# i
SOBU# 3
SOBU# 2
SOBU# 1
EP# i
SOB# 1
SR_TRANS.SRO FILE
ORIGINAL PGC
PGCI
PROGRAM# 1
CELL# 1
CELL# 2
START APAT
END APAT
SOBU OFFSET ADDRESS

FIG. 18

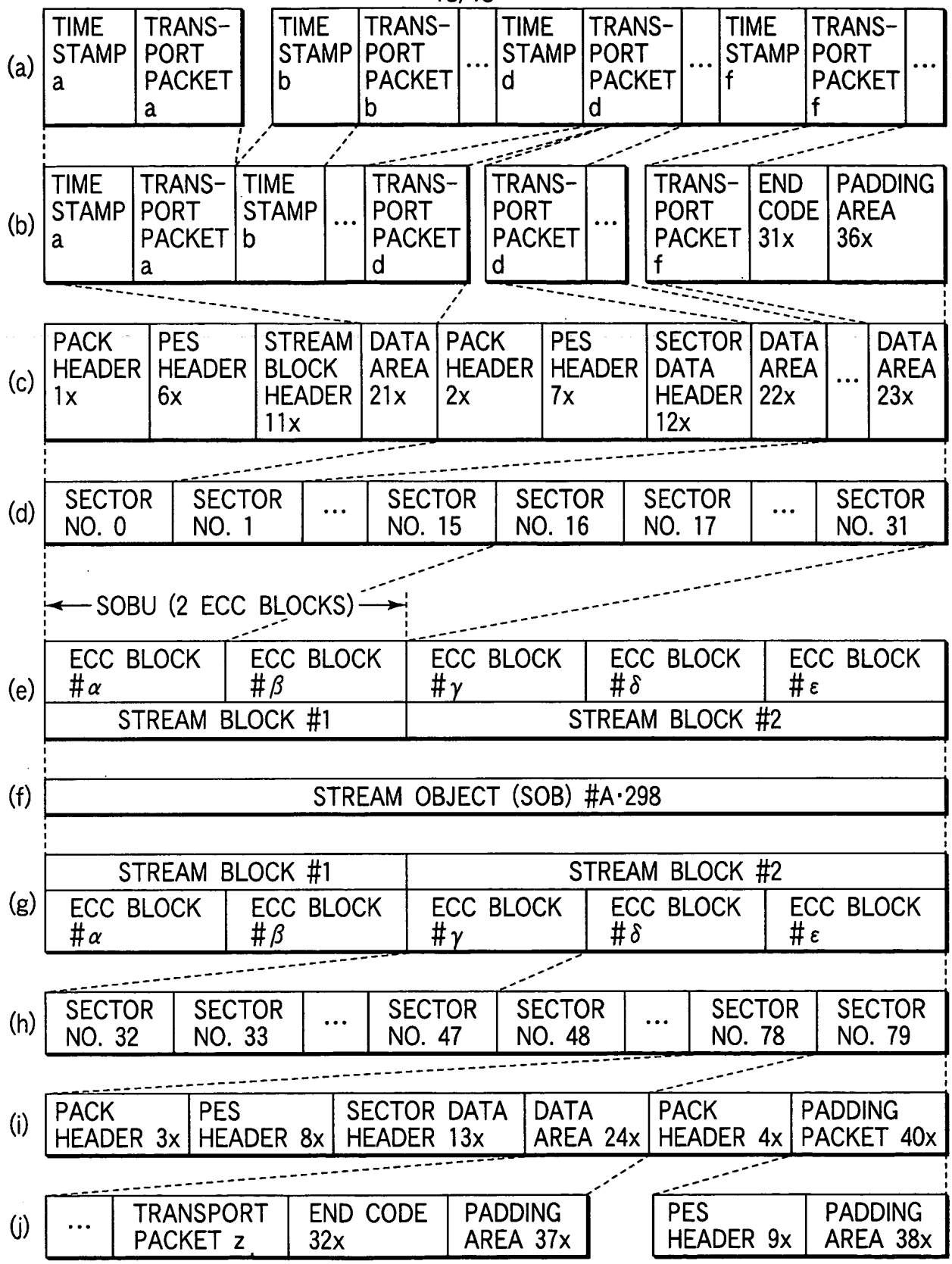


FIG. 19